

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Please amend claim 1 and cancel claims 17-45.

1. (Currently Amended) A catheter comprising:  
an elongated catheter body having proximal and distal ends and an irrigation lumen extending therethrough;  
a tip electrode fixedly and non-rotationally mounted at the distal end of the catheter body and comprising an irrigation passage;  
an infusion tube extending through the irrigation lumen in the catheter body into the irrigation passage in the tip electrode, the infusion tube being in fluid communication with the ~~radially extending irrigation branches~~ irrigation passage in the tip electrode;  
an ultrasound transducer mounted on a surface of the tip electrode, the transducer having a front surface and an opposing back surface, wherein the back surface of the transducer is mounted to the distal end of the catheter body such that the transducer is positioned to transmit ultrasound energy toward tissue facing the front surface but not toward tissue facing the back surface;  
a sensor mounted within the catheter near the ultrasound transducer for sensing a location and an orientation of the ultrasound transducer within a patient.
2. (Original) The catheter of claim 1, wherein the transducer is generally flat.
3. (Original) The catheter of claim 1, wherein the transducer is generally rectangular.
4. (Original) The catheter of claim 1, wherein the transducer has a length ranging from about 2 mm to about 10 mm.

5. (Original) The catheter of claim 1, wherein the transducer has a length ranging from about 5 mm to about 10 mm.

6. (Original) The catheter of claim 1, wherein the sensor is an electromagnetic location sensor.

7. (Original) The catheter of claim 1, wherein the sensor is mounted within 10 mm of the transducer.

8. (Original) The catheter of claim 1, wherein the sensor is mounted within 5 mm of the transducer.

9. (Original) The catheter of claim 1, wherein the sensor is mounted under the transducer.

10. (Canceled).

11. (Canceled).

12. (Canceled).

13. (Canceled).

14. (Canceled).

15. (Previously Presented) The catheter of claim 48, wherein the deflection wire is anchored at a position that is about 90° relative to the direction that energy is emitted from the

transducer to thereby deflect the distal end of the catheter in a direction generally perpendicular to the direction that energy is emitted from the transducer.

16. (Canceled).

17-45. (Canceled).)

46. (Previously Presented) The catheter of claim 1, further comprising means for deflecting the distal end of the catheter.

47. (Previously Presented) The catheter of claim 46, wherein the means for deflecting the distal end of the catheter comprises:

a control handle mounted at the proximal end of the catheter body; and

a deflection wire extending through the catheter body, the deflection wire having a distal end fixedly attached near the catheter body's distal end and a proximal end anchored to a mechanism in the control handle that facilitates longitudinal movement of the deflection wire relative to the catheter body.

48. (Previously Presented) The catheter of claim 47, wherein the deflection wire is anchored at a position that is about 70° to 120° relative to the direction that energy is emitted from the transducer to thereby deflect the distal end of the catheter in a direction generally transverse to the direction that energy is emitted from the transducer.